Filed : April 26, 2001

Page : 2 of 16

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

- 1. (Currently amended) An extraction unit comprising:
- a carrier having an upper portion, a lower portion and a bottom surface; and an extraction device for mating with the carrier having a first end, a second end, an inner surface and an outer surface, comprising:
- a shoulder that extends outwardly from the outer surface and disposed between the first and second ends;
- a carrier-receiving portion at the first end comprising at least one flange that projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement; and
- a conduit interconnected to the carrier-receiving portion; the conduit extending between a first opening at the carrier-receiving portion and a second opening at the second end; wherein the carrier mates with the carrier-receiving portion such that the inner
- surface of the at least one flange contacts the lower portion of the earrier, closes the first opening, seals the first opening to prevent fluid flow through the bottom surface, and forms a reservoir, and wherein the inner surface of the at least one flange contacts the lower portion of the carrier, and wherein the second end is adapted to mate with a vessel such that the vessel is in fluid communication with the conduit.
- 2. (Previously Presented) The extraction unit of claim 1 wherein the reservoir has a volume of approximately 0.01 to 250  $\mu$ L.
  - 3. (Canceled)

Filed : April 26, 2001 Page : 3 of 16

4. (Previously Presented) The extraction unit of claim 1 wherein specifically transferred material transferred to the carrier by microdissection and non-specifically transferred material are present on the carrier and some non-specifically transferred material is excluded from the reservoir and some specifically transferred material transferred is included in the reservoir.

5. (Withdrawn) An extraction unit comprising:

a carrier, and;

an extraction device for mating with the carrier having a first end and a second end, comprising;

a carrier-receiving portion at the first end; and

a conduit interconnected to the carrier-receiving portion; the conduit extending between a first opening at the carrier-receiving portion and a second opening at the second end; wherein the carrier receiving portion mates with the carrier, closes the first opening, seals the first opening to prevent fluid flow, and forms a reservoir; and

wherein at least a portion of an extending feature on the carrier is excluded from the reservoir.

6. (Withdrawn) An extraction device for mating with a carrier comprising:

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion; the conduit extending between the carrier receiving portion and a second end;

wherein the carrier-receiving portion is adapted to receive a carrier having a transfer film such that the reservoir is formed and at least a portion of the transfer film is disposed within the reservoir.

- 7. (Withdrawn) The extraction device of claim 6 wherein the carrier-receiving portion is adapted to receive the carrier such that at least a portion of the transfer film is disposed outside the reservoir.
- 8. (Withdrawn) The extraction device of claim 7 wherein the at least a portion of the transfer film disposed outside the reservoir includes at least one stand-off portion.

 Applicant : Baer, et al.
 Attorney's Docket No.: 14255-0034001 / IP-Serial No. : 09/844,187

 O399MDUS

Filed : April 26, 2001

Page : 4 of 16

9. (Withdrawn) The extraction device of claim 7 wherein at least a portion of the transfer film disposed outside the reservoir includes matter transferred to the transfer film by non-specific transfer microcapture.

10. (Withdrawn) The extraction device of claim 6 wherein the at least a portion of the transfer film disposed within the reservoir includes matter transferred to the transfer film by specific transfer microcapture.

11. (Withdrawn) An extraction device for mating with a carrier comprising:

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion;

wherein the carrier-receiving portion is adapted to receive a carrier to form a reservoir and further adapted to selectively cover at least a portion of the carrier, and

wherein the at least a portion of the carrier includes an extending feature, and at least a portion of the extending feature is sealed from the reservoir.

12. (Withdrawn) The extraction device of claim 11 wherein non-specifically transferred material is on the portion of the extending feature sealed from the reservoir.

13. (Withdrawn) The extraction device of claims 11 or 12 wherein the extending feature comprises one or more stand-offs or spacers.

14-78 (Canceled)

79. (Withdrawn) A method for extracting matter on a carrier comprising the steps of: providing a carrier having a transfer film;

transferring matter to the transfer film;

providing an extraction device with a conduit having a first opening and a second opening;

Filed : April 26, 2001 Page : 5 of 16

mating the carrier to the extraction device to close the first opening;

forming a reservoir with the transfer film;

providing fluid to the reservoir via the second opening in the conduit to extract matter from the transfer film; and

removing the fluid from the reservoir.

80. (Withdrawn) The method of claim 79 wherein the step of transferring matter to the transfer film includes transferring matter to the transfer film by specific transfer microcapture; and

further including the step of disposing matter that is adhered to the transfer film by specific transfer microcapture within the reservoir.

81. (Withdrawn) The method of claim 79 wherein the step of transferring matter to the transfer film includes transferring matter to the transfer film by non-specific transfer microcapture; and

further including the step of substantially excluding matter that is adhered to the transfer film by non-specific transfer microcapture from the reservoir.

82. (Withdrawn) The method of claim 79 wherein the step of providing a carrier having a transfer film includes providing a carrier with at least one stand-off portion; and further including the step of covering the at least one stand-off portion.

83-92 (Canceled)

93. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion, the conduit having a first opening at the carrier-receiving portion;

Applicant : Baer, et al. Attorney's Docket No.: 14255-0034001 / IP-Serial No. : 09/844.187 0399MDUS

Filed : April 26, 2001

Page : 6 of 16

wherein the carrier is removably attached to the device at the carrier-receiving portion such that the first opening is closed by the bottom surface to prevent fluid flow through the bottom surface and to form a reservoir with the bottom surface and at least a portion of the conduit and wherein the device excludes at least a portion of the bottom surface of the carrier from the reservoir.

94. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion;

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device excludes at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has extending features and the extending features are excluded from the reservoir.

95. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion;

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device excludes at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has extending features and the extending features are excluded from the reservoir; and

wherein the extending features comprise one or more stand-offs or spacers.

96. (Withdrawn) An extraction unit comprising:

 Applicant : Baer, et al.
 Attorney's Docket No.: 14255-0034001 / IP-Serial No. : 09/844,187

 O399MDUS

Filed : April 26, 2001 Page : 7 of 16

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

- a carrier-receiving portion at a first end; and
- a conduit interconnected to the carrier-receiving portion;

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device excludes at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has a transfer film and at least a portion of the transfer film is excluded from the reservoir.

97. (Withdrawn) The extraction unit of claim 93 wherein the bottom surface of the carrier has a non-specifically transferred material and specifically transferred material that is transferred to the bottom surface by microdissection and at least a portion of the non-specifically transferred material is excluded from the reservoir and at least a portion of the specifically transferred material is included in the reservoir.

98. (Withdrawn) The extraction unit of claim 93 wherein the extraction device has a second end, the second end being adapted to mate with a vessel such that the vessel is in fluid communication with the reservoir.

99. (Withdrawn) The extraction unit of claim 98 wherein the vessel is a centrifuge tube or a microtiter plate.

100. (Currently amended) An extraction unit comprising:

- a carrier having an upper portion, a lower portion and a bottom surface; and
- a device adapted for mating with the carrier, the device comprising:

a carrier-receiving portion at a first end comprising at least one flange comprising an inner surface and configured to secure the carrier to the device in a compression-fit engagement;

Filed : April 26, 2001 Page : 8 of 16

a raised landing portion comprising a landing surface adapted to contact the bottom surface and disposed within the carrier-receiving portion; and

a conduit interconnected to the carrier-receiving portion and extending through the raised landing portion, the conduit having a first opening at the carrier-receiving portion;

wherein the carrier mates with the device at the carrier-receiving portion such that the inner surface of the at least one flange contacts the lower portion of the earrier, and contacts the landing surface to form a reservoir with the bottom surface and at least a portion of the conduit, and to close the first opening by the bottom surface and to prevent fluid flow through the first opening, and wherein the inner surface of the at least one flange contacts the lower portion of the carrier and wherein the device covers at least a portion of the bottom surface of the carrier from the reservoir.

101. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion:

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device covers at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has extending features and the device covers the extending features.

102. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having:

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion;

Attorney's Docket No.: 14255-0034001 / IP-

Applicant : Baer, et al. Serial No. : 09/844,187 Filed : April 26, 2001

Page : 9 of 16

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device covers at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has extending features and the device covers the extending features; and

wherein the extending features comprise one or more stand-offs or spacers.

103. (Withdrawn) An extraction unit comprising:

a carrier having a bottom surface; and

a device adapted for mating with the carrier, the device having;

a carrier-receiving portion at a first end; and

a conduit interconnected to the carrier-receiving portion;

wherein the device mates with the carrier at the carrier-receiving portion to form a reservoir and wherein the device covers at least a portion of the bottom surface of the carrier from the reservoir; and

wherein the bottom surface of the carrier has a transfer film and the device covers at least a portion of the transfer film.

104. (Previously Presented) The extraction unit of claim 100 wherein the bottom surface of the carrier has a non-specifically transferred material and specifically transferred material transferred to the carrier by microdissection and the device covers at least a portion of the non-specifically transferred material and at least a portion of the specifically transferred material is included in the reservoir.

105. (Withdrawn) An extraction unit comprising:

a carrier, and;

an extraction device for mating with the carrier having a first end and a second end, comprising;

a carrier-receiving portion at a the first end; and

Applicant: Baer, et al. Attorney's Docket No.: 14255-0034001 / IP-Serial No.: 09/844,187 0399MDUS

Filed : April 26, 2001 Page : 10 of 16

a conduit interconnected to the carrier-receiving portion; the conduit extending between a first opening at the carrier-receiving portion and a second opening at the second end; wherein the carrier receiving portion mates with the carrier, closes the first opening, seals

the first opening to prevent fluid flow, and forms a reservoir; and wherein at least a portion of an extending feature on the carrier is excluded from the reservoir; and

wherein the extending features comprise one or more stand-offs or a spacers.

106. (Withdrawn) A method for extracting matter on a carrier comprising the steps of: providing a carrier having a transfer film;

transferring matter to the transfer film;

providing an extraction device with a first end and a second end and a conduit extending between the first and second end, the conduit having a first opening at the first end and a second opening at the second end;

mating the carrier to the first end of the extraction device to close the first opening of the conduit to form a reservoir that contains at least a portion of the transfer film;

providing fluid to the reservoir through the second opening to extract matter from the transfer film;

mating a vessel to the second end of the extraction device; and

transferring the fluid from the extraction device into the vessel through the second opening.

107. (Withdrawn) The method of claim 106 wherein the step of transferring the fluid from the extraction vessel uses centrifugation.

108. (Withdrawn) The method of claim 106 wherein the step of transferring the fluid from the extraction vessel is performed without separating the carrier or the vessel from the extraction device.

109. (Cancelled)

 Applicant : Baer, et al.
 Attorney's Docket No.: 14255-0034001 / IP-Serial No. : 09/844,187

 O399MDUS

Filed : April 26, 2001 Page : 11 of 16

110. (Previously Presented) The extraction unit of claim 1, wherein the at least one flange is configured to substantially encircle the carrier.

- 111. (Currently amended) The extraction unit of claim 1, wherein the carrier-receiving portion comprises at least two flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.
- 112. (Currently amended) The extraction unit of claim 1, wherein the carrier-receiving portion comprises at least three flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.
- 113. (Currently amended) The extraction unit of claim 1, wherein the carrier-receiving portion comprises four flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.
- 114. (Previously Presented) The extraction unit of claim 100, wherein the at least one flange is configured to substantially encircle the carrier.
- 115. (Currently amended) The extraction unit of claim 100, wherein the carrier-receiving portion comprises at least two flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.
- 116. (Currently amended) The extraction unit of claim 100, wherein the carrier-receiving portion comprises at least three flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.

Applicant : Baer, et al. Attorney's Docket No.: 14255-0034001 / IP-Serial No.: 09/844,187 0399MDUS

Filed : April 26, 2001 Page : 12 of 16

117. (Currently amended) The extraction unit of claim 100, wherein the carrier-receiving portion comprises four flanges that each projects from the shoulder, comprises an inner surface, and is configured to secure the carrier to the extraction device in a compression-fit engagement.